A marked up copy showing how these claims 38-47 differ from claims 22-31 of the substitute specification that was incorporated by the preliminary amendment is provided at the end of this document. Claims 48-53 are new.

Remarks

A. Second Supplemental Information Disclosure Statement

Enclosed is a second supplemental information disclosure statement that is provided to submit a reference which has recently come to Applicant's attention in connection with another case for the same applicant.

B. Restriction Requirement

The Office Action imposed a restriction requirement, apparently based upon the erroneous assumption that claims 1-32 from the PCT application were those still pending in this U.S. national phase case. However, there was a preliminary amendment (and accompanying substitute specification), which replaced original claims 1-32 with claims 1-37.

Nevertheless, Applicant believes from the restriction requirement that was imposed that the Office considers product claims restrictable from claims drawn to methods of making, and further product claims restrictable from claims drawn to methods of using those products. Further, there was a restriction with respect to claim 3 subject matter should the product claims be elected.

In response to those concerns, Applicant hereby elects, without traverse, the methods of making claims (claims 22-31) of the substitute specification, now restated as claims 38-47 for purposes of clarity albeit further amended to focus more closely on non-naturally occurring amyloid fibril preparing processes (see e.g. prior claim 11 for support regarding non-naturally occurring fibrils).

New claims 48-51 describe the fibrils further by being dependent on the elected subject matter. They find support at, among other places, prior claims 4-7.

New claim 52 describes a further step of the method, is dependent on the elected subject matter, and finds support at, among other places, claim 33.

New claim 53 is dependent on the elected subject matter and recites a product produced by the claimed process.

Since Group I, claim 3 was not elected (which was the only claim which recited the five sub-restricted species), it does not appear that the further provisional election of a sub-specie is required.

The above election is made without prejudice to the filing of one or more divisionals on the non-elected subject matter. In this regard, Applicant believes that neither U.S. patent 4,666,829, nor newly cited WO 97/07402 enclosed herewith, undermine patentability of, for example, non-naturally occurring amyloid fibrils. In this regard, U.S. patent 4,666,829 describes either creating a crude extract containing substantial amounts of extraneous proteins, or creating further purified materials that are solubilized so as to destroy their fibril characteristics, and WO 97/07402 describes Alzheimer's associated proteins apparently responsible for naturally-occurring fibril deposits in the brain.

In sum, claims 38-53 now all incorporate a surprising method of artificially turning proteins into non-naturally occurring amyloid fibrils, the latter then providing a reliable large quantity supply of such fibrils for a variety of desired uses. The ethical, cost and other concerns involved in attempting to isolate large quantities of fibrils from natural sources is a prohibitive barrier that the present invention overcomes.

Conclusion

In view of the above amendment and remarks reconsideration and allowance are respectfully requested with respect to claims 38-53. Enclosed is a three-month petition

for extension of time (with authorization to charge the required fee). Also enclosed is a conditional fee authorization with respect to the second supplemental information disclosure statement. Apart from these charges, no additional fees are believed to be needed for the submission, entry and full consideration of this amendment. However, if any are, please charge them to Deposit Account 17-0055.

Respectfully submitted,

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Dated: January 15, 2003 By: _____

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Marked-Up Copy Of Amendment - 09/787,560

Claims 22-31 are proposed to be amended and renumbered as claims 38-47 as follows:

--[22]38. (Amended) A process for preparing an amyloid fibril, which process comprises:

preparing a solution comprising a protein, said solution being in a state so that nucleation and fibril growth will occur over an acceptable time, and

allowing nucleation and fibril growth to take place;

wherein a non-naturally occurring amyloid fibril is prepared by said process.

[23]39. (Amended) A process according to claim [22]38 wherein the solution further comprises an alcohol.

[24]40. (Amended) A process according to claim [22]38 wherein the solution further comprises alcohol selected from methanol, ethanol, propanol, butanol, trifluoroethanol and hexafluoroisopropanol.

[25]41. (Amended) A process according to claim [22]38 wherein the solution further comprises acetonitrile.

[26]42. (Amended) A process according to claim [22]38 wherein the solution further comprises urea.

[27]43. (Amended) A process according to claim [22]38 wherein the concentration of protein in the solution is from 0.1 mM to 10 mM.

[28]44. (Amended) A process according to claim [22]38 wherein the temperature of the solution is from 0°C to 100°C.

[29]45. (Amended) A process according to claim [22]38 wherein the solution is acidic.

[30]46. (Amended) A process according to claim [22]38 wherein the pH of the solution is from 0.5 to 6.5.

[31]47. (Amended) A process according to claim [22]38 wherein the solution is seeded with previously formed particles of protein.

The newly added claims are claims 48-53:

48. (New) A process according to claim 38 wherein the non-naturally occurring amyloid fibril prepared by said process comprises a pharmaceutically active compound.

49. (New) A process according to claim 38 wherein the non-naturally occurring amyloid fibril prepared by said process comprises a metal.

50. (New) A process according to claim 49 wherein the metal is selected from the group consisting of copper, silver and gold.

51. (New) A process according to claim 38 wherein the non-naturally occurring amyloid fibril prepared by said process comprises one or more functional groups capable of binding one or more reactants.

52. (New) A process according to claim 38, comprising the further step of using the non-naturally occurring amyloid fibril prepared by said process as a plastic, or in electronics, or in catalysis.

53. (New) An amyloid fibril produced by the method of claim 38.--

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